

ABSTRACT

To the end of providing a constant AC voltage to a variable load (1) which is arranged remote of a voltage source (3), a voltage drop over an electrical supply line (2) which connects the load to the voltage source (3) is compensated for by a compensation AC voltage which, if added to the constant AC voltage, results into the output AC voltage U_{full} of the voltage source (3) and the value of which is varied depending on the absolute value of the alternating current (I) conducted to the load (1) and on the phase angle ϕ between the output AC voltage U_{full} of the voltage source (3) and the alternating current (I).

(Figure 1)